

impossible to attribute the good effects which many clinicians have obtained with it to its bactericidal action.

The percentage of metallic silver in each preparation was determined in advance. The results follow: Collargol, 86.6; silver fluoride, 81.7; silver nitrate, 63.6; itrol, 60.8; actol, 51.5; argentol, 31.2; ichthargan, 27.1; argyrol, 20; albargin, 13.4; nargol, 9.6; largin, 9.4; novargan, 7.9; protargol, 7.4; argentamine, 6.4; argonin, 3.8.

Infantile Mortality and Factory Employment of Women.—At the National Conference on Infantile Mortality, held in London, in June, 1906, GEORGE REID (*Lancet*, August 18, 1906, p. 423) contrasted the infantile mortality of two districts, identical in health conditions, but with the important difference, that, in the one in which the chief industry is making pottery, women are largely employed; whereas in the other, where mining and iron-working are the principal industries, there is practically no employment for women. From figures obtained from the Registrar-General, he classified the artisan towns into three groups: (1) Those in which the proportion of employed married and widowed females between the ages of eighteen and fifty years reached or exceeded 12 per cent. of the total number of women of those ages; (2) those in which the proportion was from 6 to 12 per cent.; and (3) those in which it was below 6 per cent. In group 1, the infantile mortality was highest and in group 2 it was lowest, and this order was found to obtain constantly since 1881. Thus, in the decades 1881-1890, 1891-1900, and four-year period 1901-1904, the average yearly infantile mortality rates of group 1 were 195, 212, and 193; of group 2 were 165, 175 and 156; and of group 3 were 156, 168, and 149. The reasons for these differences are not far to seek. The factory working-woman stays at her work until confinement and returns as soon afterward as possible, leaving her child to the care of others and to be fed artificially; the home-staying woman has far lighter work up to confinement and can give her infant personal attention and its natural food.

Naphthol Preparations in Disinfection.—Although both alpha- and beta-naphthol possess very marked bactericidal power, their very slight solubility in water has made them unavailable for general use; and attempts to introduce beta-naphthol in the form of its soluble sodium compound, which is much less powerful than free naphthol, have come to naught, because through the influence of light and air the compound is converted into an insoluble inert substance. SCHNEIDER (*Ztsch. f. Hygiene u. Infectiousk.*, 1906, lii, 534) found that equal parts of beta-naphthol and dried sodium carbonate, thoroughly mixed, can be employed to advantage, the carbonate promoting the solution of the naphthol in water without forming with it a new compound. A 1 per cent. solution of this mixture proved able to kill, in ninety-six hours, dried anthrax spores which resisted the action of 5 per cent. lysol for ten days, and a slightly stronger solution (1.50 per cent.) destroyed them in seventy-two hours. Against typhoid organisms and staphylococci the mixture proved to be about twice as powerful as lysol.

Typhoid Fever from Inhaled Infected Spray.—In a village in Alsace, one hundred persons were seized with typhoid fever within a period of six months. The infection is attributed by GARCIN (*Strassburger*

med. Zeit., January, 1906, p. 36) to water from an old well, which was used solely for feeding a spraying apparatus in a spinning room. The water was not available for drinking purposes, and hence, infection could have gained access to the system only through inhalation.

Detection of Typhoid Bacilli in Milk.—An outbreak of typhoid fever in Kolozsvár has been traced by D. KONRADI (*Centralb. f. Bakt.*, 1905, I Abt, xl, 31) to milk, the specific organism having been detected in two of thirty-three samples of milk examined. It appeared that the son of the dairyman had a mild typhoid, which did not prevent him from doing the milking and thus infecting the milk directly.

Typhoid Carriers.—According to LENTZ (*Klinisches Jahrbuch*, 1905, xiv, 475) about 4 per cent. of persons with typhoid fever become chronic carriers of the bacillus. He discovered one individual who continued to eliminate the organisms in the feces forty-two years after having had the disease. DOERR (*Centralb. f. Bakt.*, etc., Orig., 1905, xxiv, 624) quotes cases cited by others, in which the organisms were isolated from the gall-bladder seventeen and twenty years, respectively, after recovery. KUTSCHER (*Berl. klin. Woch.*, 1905, xlii, 1620) believes that the mild cases are especially dangerous. KAYSER (*Arbeiten aus dem kaiserlichen Gesundheitsamte*, 1906, xxiv, No. 1) says that he has detected six chronic carriers who were the cause of the disease in others, and that of 205 cases of the disease occurring in Strassburg, in 1904 and 1905, twenty-eight were traceable to "healthy" carriers. KLINGER (*Ibid.*) discovered twenty-three carriers in a period of a little more than two years. All yielded the organisms in the stools and eight in the urine; and twelve of the number had no typhoid history.

The Budde Process of Preserving Milk.—R. TANNER HEWLETT (*Lancet*, 1906, 209) believes that as conditions now exist, the use of moderate amounts of preservatives is preferable to that of dirty milk, swarming with bacteria; moreover, without the use of preservatives in hot weather, much of the London milk supply would be received in condition unfit for delivery. Employing fresh milk, he tested the efficiency of the Budde process in samples to which cultures of various organisms were added, including *B. typhosus*, *B. paratyphosus*, *B. diphtheriæ*, *B. tuberculosis*, *B. anthracis* (sporing), *B. coli*, *B. dysenteriæ*, *B. subtilis*, *B. mycoides*, and *Penicillium glaucum*, and found that the non-sporing organisms were destroyed, and the spore-bearers greatly reduced in number. Hewlett states that milk properly treated by this method is unchanged in odor, appearance, taste or otherwise, and that it will keep without apparent alteration for eight to ten days in hot weather, although at the end of the process the whole of the hydrogen peroxide is decomposed and no trace of it can be detected. In ordinary milk, the reduction in the number of bacteria amounts to more than 99.9 per cent.

(The Budde process appears to yield widely differing results in the hands of different experimenters, due probably to differences in the commercial preparations of hydrogen peroxide used, and also to the degree of bacterial contamination of the milk with which the tests are made.—C. H.)